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SERIAL NO.: 10/536,982

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AMENDMENTS TO THE CLAIMS

Please amend claims 24, 29 and 35, as follows.

Please add new claims 38-44.

The following listing of claims replaces all versions, and listings, of claims in this application.

Listing of Claims:

1-23. (Canceled)

24. (Currently Amended) A method of imaging diagnostic information on the GI tract, the method comprising:

administering to a patient an ingestible imaging capsule;

administering to a patient a composition comprising a fluorescent dye;

flashing illumination within the GI tract, thereby providing a light period and a dark period;

obtaining a fluorescent image of the GI tract tissue during the dark period on an image sensor within said ingestible imaging capsule; and

wirelessly transmitting image data from the ingestible imaging capsule.

25. (Previously Presented) The method of claim 24 comprising obtaining, on an image sensor within the ingestible capsule, a real image of the tissue during the light period.

26. (Previously Presented) The method of claim 25 comprising obtaining the fluorescent image and the real image on the same image sensor.

27. (Previously Presented) The method of claim 24 wherein flashing comprises alternately illuminating with white light.

28. (Canceled).

29. (Currently Amended) The method of claim 24 comprising focusing light remitted from the GI tract tissue onto an image sensor within an the ingestible capsule.

30. (Previously Presented) The method of claim 24 wherein flashing comprises alternately illuminating with monochromatic light and white light.

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31. (Previously Presented) The method of claim 25 comprising processing the real image and the fluorescent image to obtain diagnostic information.

32-34. (Canceled)

35. (Currently Amended) A method comprising:

staining cells of an endo-luminal wall;

administering to a patient an in-vivo imaging capsule;

activating illumination of the in-vivo imaging capsule in a flashing mode; and

capturing light remitted from said cells onto a light detector within the in-vivo imaging capsule.

36. (Previously Presented) The method as in claim 35, wherein said illumination comprises a polychromatic illumination and a monochromatic illumination.

37. (Previously Presented) The method as in claim 35, wherein said capturing comprises capturing a real image and a fluorescent image.

38. (New) The method according to claim 24, wherein said composition administered further comprises an antibody to an antigenic determinant associated with GI cancer.

39. (New) The method according to claim 38, wherein said antibody is specific to an antigenic determinant selected from a group consisting of: CA19 9 and CEA.

40. (New) The method according to claim 24, wherein said composition comprises an antigenic determinant with affinity to antibodies associated with GI cancer.

41. (New) The method according to claim 40, wherein said antigenic determinant is Gastric Mucin.

42. (New) The method according to claim 24, comprising the step of washing the GI tract tissue, prior to administering a composition.

43. (New) The method according to claim 24, further comprising the step of washing the GI tract tissue from excess of fluorescent dye, prior to administering the ingestible imaging capsule.

44. (New) The method according to claim 35, further comprising the step of washing the endo-luminal cells from excess of stain, prior to administering the in-vivo imaging capsule.